310 CMR 6.00: AMBIENT AIR QUALITY STANDARDS FOR THE COMMONWEALTH OF MASSACHUSETTS

Section

6.01: Definitions

Ambient Air means that portion of the atmosphere, external to buildings, to which the general public has access.

Department means the Department of Environmental Protection.

Equivalent method means any method of sampling and analyzing for an air pollutant which can be demonstrated to the Department's satisfaction to have a consistent relationship to the reference method.

Reference method means a method of sampling and analyzing for an air pollutant, as described in the Federal Register, Volume 36, number 228, November 25, 1971.

6.02: Scope.

(1) Primary ambient air quality standards define levels of air quality which the Department judges are necessary, with an adequate margin of safety, to protect the public health. Secondary ambient air quality standards define levels of air quality which the Department judges necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. Such standards are subject to revision, and additional primary and secondary standards may be promulgated as the Department deems necessary to protect the public health and welfare.

(2) The promulgation of primary and secondary ambient air quality standards shall not be considered in any manner to allow significant deterioration of existing air quality in any portion of the Commonwealth.

6.03: Reference Conditions

All measurements of air quality are corrected to a reference temperature of 25°C and to a reference pressure of 760 millimeters of mercury (1,013.2 millibars).

6.04: Standards

(1) Sulfur Oxides (sulfur dioxide).

(a) Primary Ambient Air Quality Standards for Sulfur Oxides (sulfur dioxide). The primary ambient air quality standards for sulfur oxides, measured as sulfur dioxide by the reference method described in 40 CFR Part 50 or by an equivalent method, are:

1. 80 micrograms per cubic meter (0.03 p.p.m.) annual arithmetic mean.
2. 365 micrograms per cubic meter (0.14 p.p.m.) Maximum 24-hour concentration not to be exceeded more than once per year.

(b) Secondary Ambient Air Quality Standards for Sulfur Oxides (sulfur dioxide). The national secondary ambient air quality standard for sulfur oxides, measured as sulfur dioxide by the reference method described in 40 CFR Part 50 is: 1,300 micrograms per cubic meter (0.5 p.p.m.) -- maximum three-hour concentration not to be exceeded more than once per year.

6.04: continued

(2) Particulate Matter.

(a) Primary Ambient Air Quality Standards for Particulate Matter. The primary ambient air quality standards for particulate matter, measured by the reference method described in Appendix J of 40 CFR Part 50, or by an equivalent method, are:

1. 50 micrograms per cubic meter annual ambient air quality standard, attained when the expected annual mean arithmetic concentration, as determined in accordance with Appendix K to 40 CFR Part 50, is less than or equal to 50 micrograms per cubic meter.
2. 150 micrograms per cubic meter - maximum 24-hour concentration, attained when the expected number of days per calendar year with a 24 hour average concentration above 150 micro-grams per cubic meter, as determined in accordance with Appendix K to 40 CFR Part 50, is less than or equal to one.
3. For purposes of determining attainment with standards, particulate matter shall be measured in the ambient air as PM10.

(b) Secondary Ambient Air Quality Standards for Particulate Matter. Identical to those of the Primary Ambient Air Quality Standards for Particulate Matter.

(3) Primary and Secondary Ambient Air Quality Standards for Carbon Monoxide. The primary and secondary ambient air quality standards for carbon monoxide, measured by the reference method described in CFR Part 50, or by an equivalent method, are:

(a) 10 milligrams per cubic meter (9 p.p.m.) -- maximum 8-hour concentration not to be exceeded more than once per year.

(b) 40 milligrams per cubic meter (35 p.p.m.) -- maximum 1-hour concentration not to be exceeded more than once per year.

(4) Primary and Secondary Ambient Air Quality Standards for Ozone. The primary and secondary ambient air quality standard for ozone, measured and corrected for interferences due to nitrogen oxides and sulfur dioxide by the reference method described in 40 CFR Part 50, or by an equivalent method, is 240 micrograms per cubic meter (0.12 ppm) - and is expressed in a statistical form so that determination of attainment will be made when the expected number of days per calendar year with maximum hourly average concentrations above 235 ug/M^3 (0.12 ppm) is equal to less than one.

(5) Primary and Secondary Ambient Air Quality Standards for Nitrogen Dioxide. The primary and secondary ambient air quality standard for nitrogen dioxide, measured by the reference method described in 40 CFR Part 50, or by an equivalent method, is: 100 Micrograms per cubic meter (0.05 p.p.m.) -- annual arithmetic mean.

(6) Primary and Secondary Ambient Air Quality Standards for Lead. The primary and secondary ambient air quality standard for lead measured by the reference method described in 40 CFR Part 50, or by an equivalent method is: 1.5 micrograms per cubic meter - calendar quarter.

REGULATORY AUTHORITY

310 CMR 6.00: M.G.L. c. 111, § 142D.